NORTHEASTERN GREAT BASIN STANDARDS AND GUIDELINES ASSESSMENT 2006 FINAL DETERMINATIONS

BENNETT FIELD ALLOTMENT

Elko Field Office

I. Introduction

In accordance with 43 CFR 4180, the Elko Field Office is required to complete standards and guidelines assessments on grazing allotments in order to determine whether or not existing grazing management practices are resulting in the attainment of the standards for rangeland health and are in conformance with the guidelines. The following assessment is based on a review of an evaluation of monitoring data completed in the spring of 2006 and analysis of monitoring information obtained between 1990 and 2005. This assessment is in accordance with BLM Manual 4180-1, *Rangeland Health Standards*, approved on January 19, 2001. The approved standards for rangeland health that will be evaluated in this assessment are as follows:

Standard 1. Upland Sites: Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate and landform.

Standard 3. Habitat: Habitats exhibit a healthy, productive, and diverse population of native and/or desirable plant species, appropriate to the site characteristics, to provide suitable feed, water, cover and living space for animal species and maintain ecological processes. Habitat conditions meet life cycle requirements of threatened and endangered species.

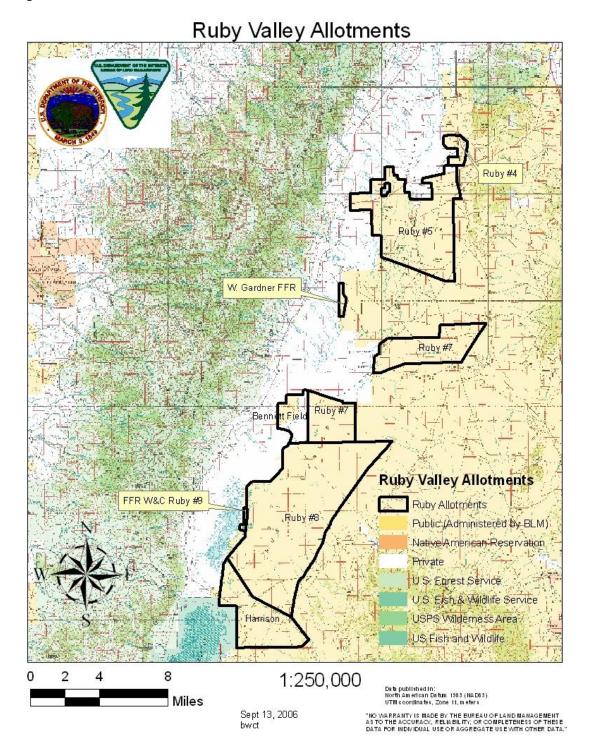
Standard 4. Cultural Resources: Land use plans will recognize cultural resources within the context of multiple use.

This assessment does not include an assessment of Standard 2 (Riparian and Wetland Sites) or Standard 5 (Healthy Wild Horse and Burro Populations) because there are no riparian or wetland sites, and no wild horse herd management areas in this allotment.

II. Description of the Allotment

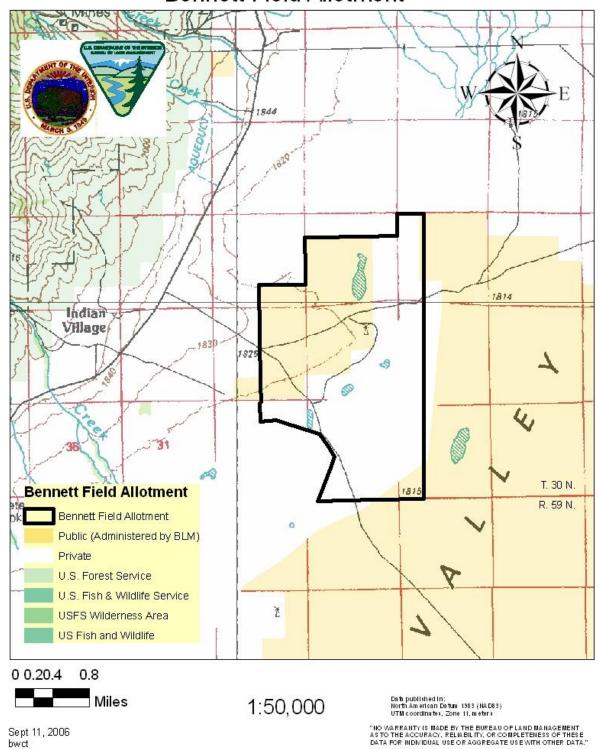
Located in southern Ruby Valley, this allotment contains 2,717 acres, of which 1,591 acres are private and 1,125 acres are public. It is grazed by one permittee who holds a grazing permit for a total of 179 AUMs in active grazing preference. Ruby #7 borders the allotment to the east and Ruby #8 borders the allotment to the south.

Map 1.



Map 2.

Bennett Field Allotment



The allotment is currently being grazed from 4/11 though 8/25 each year. The allotment is a "C" allotment which means custodial. The criteria which pertain to C allotments are as follows:

Present range condition is not a factor

Allotments have low resource production potential, and are producing near their potential Limited resource-use conflicts/controversy may exist

Opportunities exist for positive economic return on public investment.

Present management appears satisfactory or is the only logical practice under existing resource conditions

The Wells Resource Management Plan and Rangeland Program Summary objectives for this allotment are: 1) provide forage to sustain 180 AUMs for livestock grazing; 2.) Manage livestock to maintain present ecological status and trend; 3.) Periodically evaluate the monitoring data for the allotment to reinstate 160 AUMs of suspended non-use when they become permanently available; 4.) Manage rangeland habitat to provide forage for wildlife (antelope 5 AUMs); and 5.) Facilitate big game movements by fence modification.

III. Assessment

A. Indicators and Studies Summary

1. Actual Use Summary 1987 through 2005

Actual Use					
UX Livestock/Neil McQueary					
Year	AUMs				
1987	147				
1988	40				
1989	260				
1990	52				
1991	122				
1992	54				
1993	52				
1994	133				
1995	3261				
1996	180 ¹				
1997	2401				
1998	2541				
1999	2601				
2000	128				
2001	114				
2002	1271				
2003	68				
2004	52				
2005	85				
Average	142				

¹ Use occurred during the winter and across calendar years but remained in the grazing fee year. The grazing fee year is from March of one year through the end of February of the next year. Example is 3/01/06 to 2/28/07.

Average actual use is 142 AUMs.

2 Key Area Utilization 1987-2005.

No key area has been established in the Bennet Field						
Allotment						
Key Species: Indian ricegrass, (Oryzopsis hymenoides), Needle						
and threadgrass (Stipa comata)						
Desired Use: 50%						
Year	Utilization					
1987	Not recorded					
1988	Not recorded					
1989	Not recorded					
1990	Not recorded					
1991	Not recorded					
1992	Not recorded					
1993	Not recorded					
1994	Not recorded					
1995	STCO4 - 50%					
	ORHY – 6%					
1996	STCO4 – 11%					
	ORHY – 6%					
1997	Not recorded					
1998	Not recorded					
1999	STCO4 – 37%					
	ORHY – 17%					
2000	Not recorded					
2001	Not recorded					
2002	Not recorded					
2003	Not recorded					
2005	Not recorded					
Average	STCO4 – 33%					
g	ORHY – 12%					

3. Carrying Capacity Calculations

The carrying capacity calculation for the Bennett Field Allotment will be completed concurrently with the Ruby #8 Allotment evaluation process.

B. Wildlife

1. Terrestrial Wildlife Species including Migratory Birds and BLM Special Status Species

The Bennett Field Allotment in association with the surrounding native Wyoming big sagebrush vegetation may provide habitat for approximately 100 bird species, 70 mammal species, and several reptile and amphibian species that potentially inhabit similar sagebrush habitats throughout the northern Nevada. Additional species are also found in the vicinity of riparian and meadow habitats on a seasonal or yearlong basis. Many of these species are shown in the 2006 Nevada Department of Wildlife's Wildlife Species List for the allotment (Appendix A), and the 1992 BLM Nevada Elko District Bird, Mammal, and Reptile and Amphibian Lists available through BLM Elko Field Office. Some of the species are shown or duplicated in Migratory Birds by Habitat Type list from Nevada Partners in Flight Bird Conservation Plan in Table 1.

The Bennett Field Allotment is located in the southern portion of Ruby Valley, (see attached map). There are no streams or springs within this allotment. The Bennett Field Allotment is predominantly comprised of an alkali floodplain with interspersed sagebrush islands, with vegetation comprised of western wheatgrass, saltgrass, and various species of grasses adapted to the alkali environment. The western boundary is a sandy, upland site with Thurber's needlegrass as the dominant grass species. The entire allotment is identified as mule deer intermediate range (MDI) and the eastern edge as antelope crucial winter habitat. A limited number of mule deer and antelope utilize the allotment as summer habitat and mule deer migrate through during the spring and fall (see map 3).

The western edge and the most southern portions of the allotment are also identified as sage grouse summer habitat. In addition, these southern areas are identified sage grouse winter habitat.

Federally Listed and Candidate species - The U. S. Fish & Wildlife Service has identified that the bald eagle (a threatened species) the yellow-billed cuckoo (a candidate species), the peregrine falcon (an endangered species) and the Columbia spotted frog (a candidate species) as species that may occur in the Ruby Valley Allotments (March 9, 2006, File No. 1-5-06-SP-093.). The Nevada Department of Wildlife has supplied a list of species that may occur within the area including the Bennett Field Allotment. This list is not specific to which species are actually likely to occur with the Bennett Field Allotment or those which have been documented within the allotment. The list also included "Locally Extirpated" species, due to the fact that area habitat once could support these species. See Appendix A for this species list. The Nevada Department of Wildlife's (NDOW) 2006 Wildlife Species List for the allotment also includes the endangered California condor (*Gymnogyps californianus*).

However, this same list shows these condor and cuckoo species as "locally extirpated." In addition, there are no known historical California condor site records on the BLM Elko District nor is there any appropriate habitat (cottonwood-willow forest) for yellow-billed cuckoos located within or in close proximity to the Bennett Field allotment. The bald eagle is a migrant and winter resident on the allotment. Suitable winter habitat is widely dispersed on uplands, irrigated lands and riparian areas throughout the Elko District as documented during formal surveys completed through coordination by BLM and the Nevada Department of Wildlife. The peregrine falcon may also be a transient forager through the Ruby Valley but there is no documented nesting habitat within any of the Ruby Allotments. There have been no spotted frog sightings within the Ruby Valley.

Other Special Status Species – There are 35 species designated as Nevada BLM Sensitive Species which potentially use this allotment in association with other habitat areas. See Appendix B for a complete list of these species.

The area around and including the Bennett Field Allotment provides habitat for the following avian Nevada BLM Sensitive Species on a seasonal or yearlong basis: loggerhead shrike, burrowing owls, golden eagles, Swainson's hawks, ferruginous hawks, ospreys, vesper sparrows, short-eared owls, prairie falcons, black-rosy finches, least bittern, white-faced ibis, Sandhill cranes, and sage grouse.

Sage Grouse

The allotment is within the Ruby Valley Sage Grouse Population Management Unit (PMU) in Northeastern Nevada considered under the Elko Strategy by the Northeastern Nevada Stewardship Group Inc. (NNSG). There is one sage grouse lek (breeding display areas) within the Bennett Field allotment boundary and one reported just outside the western boundary, which would have influence that extends into the allotment itself. All areas of the Bennett Field Allotment potentially provides sage grouse habitat having both big sagebrush and low sagebrush which are required for food and cover. Sage grouse use this allotment primarily as summer and winter habitat. There is also potentially viable nesting/ brood rearing habitat in the Bennett Field allotment as indicated by the presence of lek areas. The allotment's native salt grassland contains big sagebrush islands which provide forage and cover for sage grouse. These areas were deemed adequate to provide hens with the needed cover and nutritional requirements for breeding activities. Also, the western areas of the allotment adjacent to the Franklin River riparian corridor may provide succulent riparian vegetation needed by juvenile birds.

Sagebrush canopy cover, where it occurs was estimated at 20% to 30% based on data collected in 2002 and field observations in 2006.

Pygmy rabbits

Pygmy rabbits are a BLM Sensitive Species petitioned for listing as threatened or endangered under the Endangered Species Act of 1973. On May 20, 2005, the U.S. Fish and Wildlife Service announced a 90-Day finding in the Federal Register indicating that, "... the petition does not provide substantial information indicating that listing the pygmy rabbit may be warranted. The Finding does not downplay the need to conserve, enhance or protect pygmy rabbit habitat. Pygmy rabbits are found in a variety of vegetation types that include big

sagebrush that are suitable for creating their burrow system. Though no known formal surveys have been completed on the Bennett Field allotment, pygmy rabbits have been reported by BLM personnel on adjacent BLM-administered allotments within the Ruby Valley. The sites were stands of historic or reestablished basin big sagebrush either within ephemeral drainages or on toe-slopes of surrounding highlands.

Bats

Fifteen BLM sensitive bat species have been documented in the Elko District with the potential to occur in the Ruby Valley Allotments. These fifteen are: the Pallid Bat, Townsend's Big-eared Bat, Big Brown Bat, Silver Haired Bat, Western Red Bat, Hoary Bat, California Myotis, Western Small-footed Myotis, Little Brown Myotis, Long-eared Myotis, Long-legged Myotis, Yuma Myotis, Western Pipistrelle, Brazilian Free-tailed Bat, and the Fringed Myotis (Nevada Bat Conservation Group, 2002).

Although no surveys for bats have been conducted, the Ruby Valley area is important for many sensitive bat species. Bats occur in a variety of habitats in eastern Nevada, which include spring riparian areas, canyons, coniferous forests (including juniper), and deciduous forests. Wetlands and surface water associated with springs and Franklin Lake, sagebrush rangelands and artificial structures provide habitat for some or all of these species. The majority of the Bennett Field allotment is relatively open and natural roost sites are marginalized to the pinion/juniper woodlands to the east and the Ruby Mountains to the west. There are numerous structures and homesteads throughout the Ruby Valley were bats can roost on a temporary or permanent bases. Foraging areas are provided on the allotments' native uplands, spring sources and where use could occur in concert with use of the Franklin Lake marshes. Bats could transient forage throughout all but the salt flat areas of the Ruby # 8 allotment as they commute between the woodlands, mountains or artificial structures and the marshes.

Improvement or maintenance of range conditions, including maintenance of some sagebrush cover, would improve foraging habitat conditions for these species of bats as a variety of insects are associated with sagebrush habitats.

Other Game and Non-game Species

There are approximately 100 bird species, 70 mammalian species, and several reptile and amphibian species that potentially inhabit sage brush habitats on the allotment. Additional species are also found in the vicinity of riparian and meadow habitats on a seasonal or yearlong basis. During wet years, waterfowl nest along the river where tall grass is available for nesting cover. Many of these species are shown in the 2006 Nevada Department of Wildlife's Wildlife Species List for the allotment (Appendix A), and the 1992 BLM Nevada Elko District Bird, Mammal, and Reptile and Amphibian Lists available through BLM Elko Field Office.

Raptors

Nineteen raptor species are present in the Elko District with the potential to occur in the Ruby Valley Allotments. Of the nineteen, the following have known nest sites within the District: American Kestrel, Burrowing Owl, Cooper's Hawk, Ferruginous Hawk, Golden Eagle, Great Horned Owl, Northern Goshawk, Prairie Falcon, Red-tailed Hawk, Sharpshinned Hawk, Swainson's Hawk, and Long-eared Owl. The Short-eared Owl, Barn Owl, and Northern Harrier may have unconfirmed nesting sites as young of the year have been observed. The Red-shouldered Hawk, Merlin, Gyrfalcon, and the Flammulated Owl are known to forage in the Elko District as of December 2004 (BLM Raptor Listing, 2005).

The Ruby Valley area provides important foraging and nesting habitat for ferruginous and Swainson's hawks, prairie falcons, American kestrels, and golden eagles. The area is also likely used as wintering habitat for the northern goshawk, golden eagle, and bald eagle. The combination of shrub communities overlooking broad valleys, woodlands, and riparian areas associated with springs and Franklin Lake are present in the Bennett Field Allotment area and provide habitat for these species.

Habitat for both short-eared and burrowing owls is present in the Ruby Valley. Short-eared owls are often associated with marshy or grassy areas, while the burrowing owl occupies drier grassland and sagebrush habitats. Burrowing owls nest in underground burrows often excavated by ground squirrels, badgers, and other mammals. Suitable sagebrush habitat for burrowing owls exists within the Bennett Field allotment.

Migratory Birds

On January 11, 2001, President Clinton signed the Migratory Bird Executive Order 13186 titled "Responsibilities of Federal Agencies to Protect Migratory Birds". It directs executive departments and agencies to take certain actions to further implement the Migratory Bird Treaty Act and to conserve migratory birds. Relative to the Executive Order, the species shown in Table 1 are "priority" migratory bird species that may occur in the habitat types on BLM administered lands. This listing is from the 1999 Nevada Partners in Flight Bird Conservation Plan.

According to the BLM Elko Field Office "Bird List", there are approximately 246 species that could inhabit the Field Office area of jurisdiction on a seasonal or yearlong basis (BLM, 1999). The Ruby Valley Allotments include habitat for some or all of these migratory bird species on a seasonal or yearlong basis. The Nevada Department of Wildlife's (NDOW) 2006 Wildlife Species List indicates all species likely to utilize the habitats present within all the Ruby Valley Allotments. Species more specific to use of Bennett Field Allotment are the following:

 Table 1. Nevada Partners in Flight Bird Conservation Plan Elko District Ecotypes

Species	Sage brush	Lowland Riparian	Agri- cul ture	Species	Sage brush	Lowland Riparian	Agri- culture
Ash-throated Flycatcher		X		Swainson's Hawk	Х		X
Gray Vireo				Pinyon Jay			
Juniper Titmouse				Black-throated Gray Warbler			
Scott's Oriole				Western Bluebird			
Bank Swallow		Х		Vesper Sparrow	Х		
Black Rosy Finch	Х			Virginia's Warbler		Х	
Burrowing Owl	Х			Yellow- breasted Chat		X	
Calliope Hummingbird	X			Southwestern Willow Flycatcher		Х	
Cooper's Hawk	Х			Prairie Falcon	Х		Х
Ferruginous Hawk	Х		Х	Red-naped Sapsucker	Х		
Gray Flycatcher	Х			Sage Grouse	Х		
Lewis' Woodpecker	Х			Sage Sparrow	Х		
Loggerhead Shrike	Х			Sage Thrasher	Х		
Blue Grosbeak		Х		Bobolink			X
Greater Sandhill Crane			Х	Long-billed Curlew			X
White-faced Ibis			X				
Species		Salt Desert Scrub	Wetland	Species		Salt Desert Scrub	Wetland
Ash-throated Flycatcher				Swainson's Hawk			
Gray Vireo				Pinyon Jay			
Juniper Titmouse				Black-throated Gray Warbler			
Scott's Oriole				Western Bluebird		Х	
Bank Swallow				Vesper Sparrow			
Black Rosy Finch				Virginia's Warbler			

Burrowing Owl	Х		Yellow- breasted Chat		Х
Calliope Humming bird			Southwestern Willow Flycatcher		
Cooper's Hawk			Prairie Falcon		
Ferruginous Hawk			Red-naped Sapsucker		Х
Gray Flycatcher			Sage Grouse		
Lewis' Woodpecker	X		Sage Sparrow		
Loggerhead Shrike	Х		Sage Thrasher		
Blue Grosbeak			Wilson's Warbler		
MacGillivrays Warbler			Short-eared Owl		
Phainopepla	Х		Lucy's Warbler	Х	
Orange- crowned Warbler		Х	White-faced Ibis		X
Snowy Plover		Х	American Avocet		Х
Black Tern		Х	American White Pelican		Х
Clark's Grebe		Х	Long-billed Curlew		Х
Short-eared Owl		х	Greater Sandhill Crane		X

2. Wildlife Habitat Conditions Monitoring Summary

The area is characterized by native grasslands, riparian vegetation consisting of the Franklin River riparian corridor, agricultural lands and native big sagebrush stands. There are no wildlife habitat key areas established on the Bennett Field Allotment.

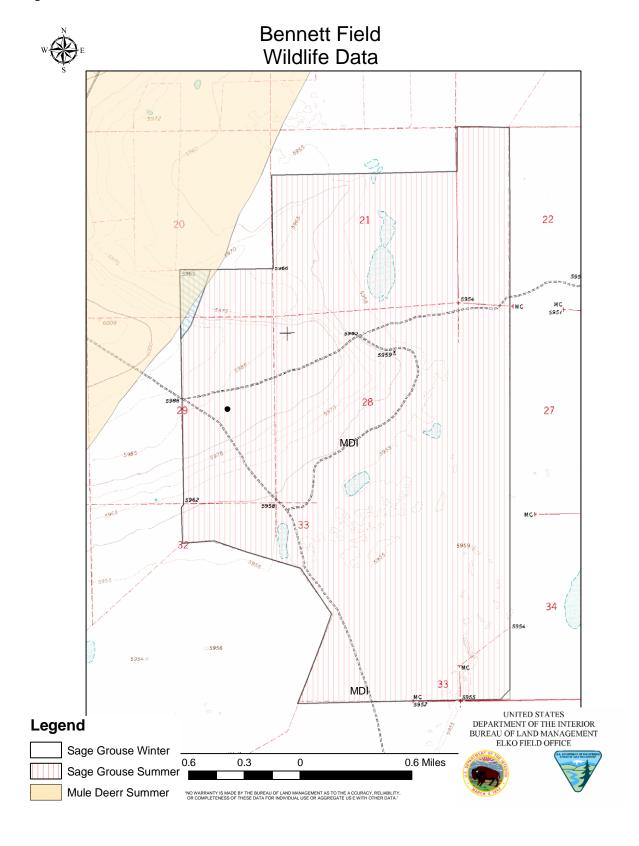
The allotment area was visited during the summer of 2006. Shrub canopy cover was not sampled in this area, although ocular observations estimated it to be 20-30%. Though some sage plants were dead or decadent (decadent plants have greater than 50% of crown material dead or dying) the majority of plants were vigorous and healthy. Occular observations showed grass/forb understory was good (see photos).

<u>Big Game Key Browse</u> – Wyoming big sagebrush age, form class and vitality was in satisfactory condition in 2006.

Bennett Field Allotment



Map 3.



IV. Conclusions and Determinations

This section draws conclusions and makes determinations regarding:

- A. Progress towards or attainment of the standards for rangeland health, and
- B. Whether livestock management is in conformance with the guidelines, and
- C. Whether existing grazing management or levels of grazing use are significant factors in failing to achieve the standards or conform with the guidelines.

Standard 1. Upland Sites: Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate and land form.

This standard is being **met**, and livestock grazing management practices are considered to be in conformance with the guidelines.

Rationale: The dominant soils in the Bennett Field Allotment range from silt loams to very gravelly loams. They are positioned on fan piedmonts and are composed of alluvium derived from limestone, dolomite and other rocks. The soils are shallow over hardpan and well drained.

The vegetative cover required to stabilize soils and ensure appropriate infiltration and permeability rates is being maintained in the allotment.

The utilization objective of 50% use in any single year on native range has been met every year since 1987. Within the native plant community of the Bennett Field Allotment, species diversity is good with good representation of life forms and number of species present. Community structure was observed to have good diversity of height, size and distribution of plants and roots. Plant health and vigor within the native communities is excellent with the majority of the plants productive and alive. Seed production within the native communities observed was good with the majority of seed stalks adequate for stand maintenance

Standard 3. Habitat: Habitats exhibit a healthy, productive, and diverse population of native and/or desirable plant species, appropriate to the site characteristics, to provide suitable feed, water, cover and living space for animal species and maintain ecological processes. Habitat conditions meet life cycle requirements of threatened and endangered species.

This standard is being **met**, and livestock grazing management practices are considered to be in conformance with the guidelines.

Rationale: The plant community in the Bennett Field Allotment at this time consists of native salt grasslands, riparian vegetation associated with the Franklin River, agricultural lands and native big sagebrush stands.

The 2006 information shows habitats do exhibit a healthy, productive, and diverse population of native and/or desirable plant species, appropriate to the site characteristics and are providing suitable feed, water, cover and living space for mule deer and antelope.

There are no conflicts that prohibit the continued meeting of the standard The level of livestock use observed in the Bennett Field allotment in 2006 was such as resulted in sufficient residual herbaceous vegetation to provide habitat for wildlife species. The presence of these vegetative attributes, indicate that upland habitat values given the present capability of the allotment supports the attainment of this standard.

Standard 4. Cultural Resources: Land use plans will recognize cultural resources within the context of multiple use.

This standard is being **met**, and livestock grazing management practices are considered to be in conformance with the guidelines.

Rationale: Based on the evaluation of existing information pertaining to range improvements and grazing, cultural resources are being recognized within the context of multiple use management in the Bennett Field Allotment.

Determination

Based on the data presented in this assessment, I have determined that Standards 1, 3 and 4 for rangeland health are being met. As stated above, Standard 2 and 5 do not apply to the Bennett Field Allotment. Existing livestock grazing is in conformance with the guidelines for each standard for rangeland health.

/s/ Bryan K. Fuell Acting for

08/29/2007

SHANE DeFOREST Assistant Field Manager Renewable Resources

Date

Appendix A.

Clover North Ruby BLM Allotments (Snow Water Lake, Warm Creek, Ruby 1-8, West Gardner, Bennett Field,

Wildlife Species List

Nevada Department of Wildlife

Birds

Order: Gaviiformes (Diver/Swimmers)

Family: Gaviidae (Loons)

Common Loon Gavia immer

Order: Podicipediformes (Flat-toed Divers)

Family: Podicipedidae (Grebes)

Pied-billed Grebe
Horned Grebe
Podiceps auritus
Eared Grebe
Podiceps nigricollis
Western Grebe
Aechmophorus occidentalis
Clark's Grebe
Aechmophorus clarkii

Order: Pelecaniformes (Four-toed Fisheaters)

Family: Pelecanidae (Pelicans)

American White Pelican Pelecanus erythrorhynchos

Family: Phalacrocoracidae (Cormorants)

Double-crested Cormorant Phalacrocorax auritus

Order: Ciconiiformes (Long-legged Waders)

Family: Ardeidae (Bitterns, Herons, Egrets)

American Bittern Botaurus lentiginosus Least Bittern Ixobrychus exilis Great Blue Heron Ardea herodias Great Egret Ardea alba Snowy Egret Egretta thula Cattle Egret Bubulcus ibis Green Heron Butorides virescens Black-crowned Night Heron Nycticorax nycticorax

Family: Threskiornithidae (Ibises)
White-faced Ibis Plegadis chihi

Family: Cathartidae (New World Vultures)

Turkey Vulture Cathartes aura

California Condor Gymnogyps californianus(L.E.)

Order: Anseriformes (Waterfowl)

Family: Anatidae (Ducks, Geese, Swans)

Anser albifrons Greater White-fronted Goose Snow Goose Chen caerulescens Canada Goose Branta canadensis Tundra Swan Cygnus columbianus Trumpeter Swan Cygnus buccinator Wood Duck Aix sponsa Gadwall Anus strepera American Widgeon Anus americana Eurasian Widgeon Anus penelope Mallard Anus platyrhynchos Blue-winged Teal Anus discors Cinnamon Teal Anus cyanoptera

Northern Shoveler Anus clypeata Northern Pintail Anus acuta Green-winged Teal Anus crecca Canvasback Avthva valisinaria Redhead Aythya americana Ring-necked Duck Aythya collaris Greater Scaup Aythya marila Lesser Scaup Aythya affinis Long-tailed Duck Clangula hyemalis Bufflehead Bucephala albeola Bucephala clangula Common Goldeneye Barrow's Goldeneye Bucephala islandica Hooded Merganser Lophodytes cucullatus Common Merganser Mergus merganser Red-breasted Merganser Mergus serrator Ruddy Duck Oxyura jamaicensis

Order: Falconiformes (Diurnal Flesh Eaters)

Family: Accipitridae (Hawks, Eagles, Osprey)

Osprey Pandion haliaetus
Bald Eagle Haliaetus leucocephalus

Northern Harrier Circus cyaneus Sharp-shinned Hawk Accipiter striatus Cooper's Hawk Accipiter cooperii Northern Goshawk Accipiter gentilis Red-shouldered Hawk Buteo lineatus Broad-winged Hawk Buteo platypterus Swainson's Hawk Buteo swainsoni Red-tailed Hawk Buteo jamaicensis Ferruginous Hawk Buteo regalis Rough-legged Hawk Buteo lagopus Golden Eagle Aquila chrysaetos

Family: Falconidae (Falcons)

American Kestrel Falco sparverius
Merlin Falco columbarius
Gyrfalcon Falco rusticolus
Peregrine Falcon Falco perigrinus
Prairie Falcon Falco mexicanus

Order: Galliformes (Chicken Relatives)

Family: Phasianidae (Grouse, Partridge)

Chukar Alectoris chukar Himalayan Snowcock Tetraogallus himalayensis

Gray Partridge Perdix perdix

Greater Sage-Grouse
Blue Grouse
C. Sharp-tailed Grouse
Wild Turkey

Centrocercus urophasianus
Dendragapus obscurus
Tympanuchus phasianellus c. (L.E.)
Meleagris gallopavo

Family: Odontophoridae (New World Quail)
California Quail Callipepla californica
Mountain Quail Oreortyx pictus (L.E.)

Order: Gruiformes (Cranes and Allies)

Family: Rallidae (Rails, Coots)

Virginia Rail Rallus limicola
Sora Porzana carolina
Common Moorhen Gallinula chloropus
American Coot Fulica americana

Family: Gruidae (Cranes)

Greater Sandhill Crane Grus canadansis tabida

Lesser Sandhill Crane Grus canadansis canadensis

Order: Charadriiformes (Wading Birds)

Family: Charadriidae (Plovers)

Black-bellied Plover Pluvialis squatarola
Snowy Plover Charadrius alexandrinus
Semi-palmated Plover Charadrius semipalmatus
Killdeer Charadrius vociferus
Mountain Plover Charadrius montanus

Family: Recurvirostridae (Avocets)

Black-necked Stilt Himantopus mexicanus
American Avocet Recurvirostra americana
Family: Scolopacidae (Sandpipers, Phalaropes)

Greater Yellowlegs Tringa melanoleuca Lesser Yellowlegs Tringa flavipes Solitary Sandpiper Tringa solitaria

Willet Catoptrophorus semipalmatus

Spotted Sandpiper Actitus macularia
Long-billed Curlew Numenius americanus

Marbled Godwit
Western Sandpiper
Least Sandpiper
Baird's Sandpiper

Limosa fedoa
Calidris mauri
Calidris minutilla
Calidris bairdii

Long-billed DowitcherLimnodromnus scolopaceusCommon SnipeGallinago gallinagoWilson's PhalaropePhalaropus tricolorRed-necked PhalaropePhalaropus lobatus

Family: Laridae (Gulls, Terns)

Franklin's Gull Larus pipixcan Bonaparte's Gull Larus philadelphia Ring-billed Gull Larus delawarensis California Gull Larus californicus Herring Gull Larus argentatus Caspian Tern Sterna caspia Forster's Tern Sterna forsteri Black Tern Chlidonias niger

Order: Columbiformes (Pigeons and Allies)

Family: Columbidae (Doves)

Rock Dove Columba livia
White-winged Dove Zenaida asiatica
Mourning Dove Zenaida macroura

Order: Cuculiformes (Cuckoos and Allies)
Family: Cuculidae (Cuckoos andRoadrunners)
Yellow-billed Cuckoo Coccyzus americanus (L.E.)

Order: Strigiformes (Nocturnal Flesh Eaters)

Family: *Tytonidae* (Barn Owls)
Barn Owl *Tyto alba*

Family: Strigidae (Owls)

Flammulated Owl Otus flammeolus Western Screech-Owl Otus kennicottii Great Horned Owl Bubo virginianus Snowy Owl Nyctea scandiaca Northern Pygmy-Owl Glaucidium gnoma Burrowing Owl Athene cunicularia Long-eared Owl Asio otus Short-eared Owl Asio flammeus

Northern Saw-whet Owl Aegolius acadicus

Order: Caprimulgiformes (Night Jars)
Family: Caprimulgidae (Goatsuckers)
Common Nighthawk Chordeiles minor
Common Poorwill Phalaenoptilus nuttallii

Order: Apodiformes (Small Fast Fliers)

Family: Apodidae (Swifts)

White-throated Swift Aeronautes saxatalis

Family: Trochilidae (Hummingbirds)

Black-chinned Hummingbird Archilochus alexandri
Calliope Hummingbird Stellula calliope

Broad-tailed Hummingbird Selasphorus platycercus
Rufous Hummingbird Selasphorus rufus

Order: Coraciiformes (Cavity Nesters)

Family: Alcedinidae (Kingfishers)
Belted Kingfisher Ceryle alcyon

Order: Piciformes (Cavity Builders)

Family: Picidae (Woodpeckers)

Lewis' Woodpecker Melanerpes lewis
Red-naped Sapsucker Sphyrapicus nuchalis
Downy Woodpecker Picoides pubescens
Hairy Woodpecker Picoides villosus
Northern Flicker Colaptes auratus

Order: Passeriformes (Perching Birds)

Family: Tyrannidae (Flycatchers)

Western Wood-Pewee
Willow Flycatcher
Hammond's Flycatcher
Gray Flycatcher
Dusky Flycatcher
Say's Phoebe
Ash-throated Flycatcher
Western Kinghird

Willow Sordidulus
Epidonax traillii
Epidonax hammondii
Epidonax wrightii
Epidonax oberholseri
Sayornis saya
Myiarchus cinerascens
Tyrannus verticalis

Western Kingbird Tyrannus verticalis
Eastern Kingbird Tyrannus tyrannus

Eastern Kingbird Tyrannus tyrannus

Family: Laniidae (Shrikes)

Loggerhead Shrike Lanius ludovicianus
Northern Shrike Lanius excubitor

Family: Vireonidae (Vireos)

Plumbeous Vireo Vireo plumbeus
Warbling Vireo Vireo gilvus

Family: Corvidae (Jays)

Western Scrub-Jay Aphelocoma californica
Pinyon Jay Gymnorhinus cyanocephalus

Black-billed Magpie Pica pica

American Crow Corvus brachyrhynchos

Common Raven Corvus corax

Family: Alaudidae (Larks)

Horned Lark Eremophila alpestris

Family: Hirundinidae (Swallows)

Tree Swallow Tachycineta bicolor
Violet-green Swallow Tachycineta thalassina
Bank Swallow Riparia riparia (L.E.)
N. Rough-winged Swallow Stelgidopteryx serripennis

Cliff Swallow Petrochelidon pyrrhonota

Barn Swallow Hirundo rustica

Family: Paridae (Chickadees, Titmice)

Black-capped Chickadee Poecile atricapillus

Mountain Chickadee Poecile gambeli

Juniper Titmouse Baeolophus griseus

Family: Aegithalidae (Bushtits)

Bushtit Psaltriparus minimus

Family: Sittidae (Nuthatches)

Red-breasted Nuthatch Sitta canadensis
White-breasted Nuthatch Sitta carolinensis

Family: Certhiidae (Creepers)

Brown Creeper Certhia americana

Family: Troglodytidae (Wrens)

Rock Wren Salpinctes obsoletus
Canyon Wren Catherpes mexicanus
Bewick's Wren Thyromanes bewickii
House Wren Troglodytes aedon
Winter Wren Troglodytes troglodytes
Marsh Wren Cistothorus palustris

Family: Cinclidae (Dippers)

American Dipper Cinclus mexicanus

Family: Regulidae (Kinglets)

Golden-crowned Kinglet Regulus satrapa
Ruby-crowned Kinglet Redulus calendula

Family: Sylviidae (Gnatcatchers)

Blue-gray Gnatcatcher Polioptila caerulea

Family: Turdidae (Thrushes)

Mountain Bluebird Sialia currucoides
Townsend's Solitaire Myadestes townsendi
Hermit Thrush Catharus guttatus
American Robin Turdus migratorius
Varied Thrush Ixoreus naevius

Family: Mimidae (Thrashers, Mockingbirds)
Northern Mockingbird Mimus polyglottos
Sage Thrasher Oreoscoptes montanus

Family: Sturnidae (Starlings)

European Starling Sturnus vulgaris

Family: Motacillidae (Pipits)

American Pipit Anthus rubescens

Family: Bombycillidae (Waxwings)

Bohemian Waxwing Bombycilla garrulus

Cedar Waxwing Bombycilla cedrorum

Family: Parulidae (Wood Warblers)

Orange-crowned Warbler Vermivora celata Nashville Warbler Vermivora ruficapilla Virginia's Warbler Vermivora virginae Yellow Warbler Dendroica petechia Yellow-rumped Warbler Dendroica coronata Black-throated Gray Warbler Dendroica nigrescens MacGillivray's Warbler Oporornis tolmiei Common Yellowthroat Geothlypis trichas Wilson's Warbler Wilsonia pusilla Yellow-breasted Chat Icteria virens

Family: Thraupidae (Tanagers)

Western Tanager Piranga ludoviciana

Family: Emberizidae (Sparrows, Towhees, Juncos)

Green-tailed Towhee Pipilo chlorurus
Spotted Towhee Pipilo maculatus
American Tree Sparrow Spizella arborea

Chipping Sparrow Spizella passerina
Brewer's Sparrow Spizella breweri
Vesper Sparrow Pooecetes gramineus
Lark Sparrow Chondestes grammacus
Black-throated Sparrow Amphispiza bileneata
Sage Sparrow Amphispiza belli

Savannah Sparrow Passerculus sandwichensis
Grasshopper Sparrow Ammodramus bairdii
Fox Sparrow Passerella iliaca schistacea

Song Sparrow Melospiza melodia
Lincoln's Sparrow Melospiza lincolnii
White-throated Sparrow Zonotrichia albicollis
Harris' Sparrow Zonotrichia querula

Gambel's White-crowned Sparrow Zonotrichia leucophrys gambelii Mountain W-crowned Sparrow Zonotrichia leucophrys oriantha

Golden-crowned Sparrow Zonotrichia atricapilla

Family: Emberizidae (Sparrows, Juncos, cont.)

Dark-eyed Junco(Oregon) Junco hyemalis therburi
Dark-eyed Junco(Gray-headed) Junco hyemalis caniceps
Lapland Longspur Calcarius lapponicus
Family: Cardinalidae (Grosbeaks, Buntings)

Black-headed Grosbeak Pheucticus melanocephalus

Blue Grosbeak Guiraca caerulea
Lazuli Bunting Passerina amoena
Indigo Bunting Passerina cyanea

Family: Icteridae (Blackbirds, Orioles)

Bobolink Dolichonyx oryzivorus
Red-winged Blackbird Agelaius phoeniceus
Western Meadowlark Sturnella neglecta

Yellow-headed Blackbird
Brewer's Blackbird
Great-tailed Grackle
Brown-headed Cowbird
Bullock's Oriole
Scott's Oriole

Xanthocephalus xanthocephalus
Euphagus cyanocephalus
Quiscalus mexicanus
Molothrus ater
Icterus bullockii
Scott's Oriole
Icterus parisorum

Family: Fringillidae (Finches, Grosbeaks)

Gray-crowned Rosy-Finch Leucosticte tephrocotis Black Rosy-Finch Leucosticte atrata Purple Finch Carpodacus purpureus Cassin's Finch Carpodacus cassinii House Finch Carpodacus mexicanus Red Crossbill Loxia curvirostra Common Redpoll Carduelis flammea Carduelis pinus Pine Siskin Lesser Goldfinch Carduelis psaltria American Goldfinch Carduelis tristis

Evening Grosbeak Coccothraustes vespertinus

Family: Passeridae (Old World Sparrows)

House Sparrow Passer domesticus

Mammals

Order: Insectivora (Insect Eaters)

Family: Soricidae (Shrews)

Merriam's ShrewSorex meriammiDusky ShrewSorex monticolusVagrant ShrewSorex vagransWater ShrewSorex palustris

Order: Chiroptera (Bats)

Family: Vespertilionidae (Plainnose Bats)

California Myotis Myotis californicus Western Small-footed Myotis Myotis ciliolabrum Long-eared Myotis Myotis evotis Little Brown Bat Myotis lucifugus Fringed Myotis Myotis thysanodes Long-legged Myotis Myotis volans Yuma Myotis Myotis yumanensis Western Red Bat Lasiurus blossvellii Hoary Bat Lasiurus cinereus Silver-haired Bat Lasionycteris noctivagans Western Pipistrelle Pipistrellus hesperus Big Brown Bat Eptesicus fuscus Townsend's Big-eared Bat Corynorhinus townsendii Euderma maculatum Spotted Bat Pallid Bat Antrozous pallidus

Family: Molossidae (Freetail Bats)

Brazilian Free-tailed Bat Tadarida brasiliensis

Order: Lagomorpha (Pikas, Hares, Rabbits)

Family: Leporidae (Hares, Rabbits)

White-tailed Jackrabbit Lepus townsendi
Black-tailed Jackrabbit Lepus californicus
Mountain Cottontail Sylvilagus nuttalli
Desert Cottontail Sylvilagus audubonii
Pygmy Rabbit Brachylagus idahoensis

Order: Rodentia (Rodents)

Family: Sciuridae (Squirrels)

Least Chipmunk Tamias minimus Cliff Chipmunk Tamias dorsalis Uinta Chipmunk Tamias umbrinus Yellow-bellied Marmot Marmota flaviventris White-tailed Antelope Squirrel Ammospermophilus leucurus Townsend's Ground Squirrel Spermophilus townsendii Belding's Ground Squirrel Spermophilus beldingi Wyoming Ground Squirrel Spermophilus elegans Golden-mantled Ground Squirrel Spermophilus lateralis

Family: Geomyidae (Gophers)

Botta's Pocket Gopher
Northern Pocket Gopher
Townsend's Pocket Gopher

Family: Heteromyidae (Kangaroo Rodents)

Little Pocket Mouse

Thomomys townsendii

Kangaroo Rodents)

Perognathus longimembris

Great Basin Pocket Mouse Perognathus parvus
Dark Kangaroo Mouse Microdipodops megacephalus

Ord Kangaroo Rat Dipodomys ordii Chisel-toothed Kangaroo Rat Dipodomys microps

Family: Castoridae (Beavers)

American Beaver Castor canadensis

Family: Cricetidae (Mice, Rats, Voles)

Western Harvest Mouse Reithrodontomys megalotis
Canyon Mouse Peromyscus crinitus

Deer Mouse Peromyscus maniculatus
Pinon Mouse Peromyscus truei
Northern Grasshopper Mouse Onychomys leucogaster
Desert Woodrat Neotoma lepida
Rushy-tailed Woodrat Neotoma cinerea

Bushy-tailed Woodrat
Mountain Vole

Neotoma lepida
Neotoma cinerea
Microtus montanus

Long-tailed Vole
Sagebrush Vole
Muskrat

Family: Zapodidae (Jumping Mice)
Western Jumping Mouse
Zapus princeps

Family: Erethizontidae (New World Porcupines)

Porcupine Erethizon dorsatum

Order: Carnivora (Flesh-Eaters)

Family: Canidae (Dogs)

Coyote Canis latrans
Gray Wolf Canis lupus (L.E.)
Common Gray Fox Urocyon cinereoargenteus

Kit Fox Vulpes velox Red Fox Vulpes vulva

Family: Procyonidae (Racoons and Allies)
Ringtail Bassariscus astutus
Common Raccoon Procyon lotor
Family: Mustelidae (Weasels and Allies)

Short-tailed Weasel
Long-tailed Weasel
Mustela erminae
Mink
Mustela vison
Wolverine
Gulo gulo (L.E.)
American Badger
Striped Skunk
Mephitis mephitis
Western Spotted Skunk
Spilogale gracilis

Family: Felidae (Cats)

Order: Artiodactyla (Hoofed Mammals)

Family: Cervidae (Deer)

Rocky Mountain Elk *Cervus canadensis*Mule Deer *Odocoileus hemionus*

Family: Antilocapridae (Pronghorn)

Pronghorn Antilocapra americana

Formilla Parida (Pisan Shara Casta)

Family: *Bovidae* (Bison, Sheep, Goats)
American Bison *Bos bison (L.E.)*

Rocky Mountain Bighorn Sheep Ovis canadensis Canadensis

Reptiles

Order: *Squamata* (Lizards, Snakes) Family: *Iguanidae* (Iguanas and Allies)

Western Fence Lizard
Sagebrush Lizard
Side-blotched Lizard
Greater Short-horned Lizard
Desert Horned Lizard

Sceloporus graciosus
Uta stansburiana
Phrynosoma hernadesi
Phrynosoma platyrhinos

Family: Scincidae (Skinks)

Western Skink Eumeces skiltonianus

Family: Teiidae (Whiptails)

Western Whiptail Cnemidophorus tigrus

Family: Boidae (Boas, Pythons)
Rubber Boa Charina bottae

Family: Colubridae (Solid-toothed Snakes)
Ringneck Snake
Striped Whipsnake

Diadophis punctatus
Masticophis taeniatus

Great Basin Gopher Snake Pituophis cantenifer deserticola

Long-nosed Snake Rhinocheilus lecontei
Western Terrestrial Garter
Ground Snake Sonora semiannulata
Night Snake Hypsiglena torquata

Family: Viperidae (Vipers)

Great Basin Rattlesnake Crotalus viridis lutosus

Amphibians

Order: Anura (Frogs and Toads) Family: Pelobatidae (Spadefoots)

Great Basin Spadefoot Toad Scaphiopus intermontanus

Family: Ranidae (True Frogs)

Columbia Spotted Frog Rana luteiventris
Northern Leopard Frog Rana pipiens
Bullfrog Rana catesbeiana

Family: Bufonidae (Toads)

Western Toad Bufo boreas

Family: Hylidae (Treefrogs)

Pacific Treefrog Hyla regilla

Fish

Order: Salmoniformes

Family: Salmonidae (Salmon and Trout)
Brook Trout Salvelinus fontinalis

Order: Scorpaeniformes Family: Cottidae (Sculpins)

Paiute Sculpin Cottus beldingii

Order: Cypriniformes

Family: Cyprinidae (Carps and Minnows)

Chiselmouth Acrocheilus alutaceus
Northern Pikeminnow Ptychochelus oregonensis
Relict Dace Relictus solitarius
Longnose Dace Rhinicthys cataractae
Speckled Dace Rhinicthys osculus
Redside Shiner Richrdsonius balteatus

Family: Catastomidae (Suckers)

Bridgelip Sucker Catastmas columbianus

L.E. = Locally Extirpated

Note: This list is a combination of wildlife sight record data and our best effort to predict what wildlife species live in this area in all seasons and under optimum habitat conditions.

*With the exception of the European Starling, House Sparrow, and Rock Dove, all birds are protected in Nevada by either the International Migratory Bird Treaty Act, Endangered Species Act or as game species. Several mammal, reptile, amphibian and fish species are also protected as either game, sensitive, threatened, endangered or priority species. For further information on a species status, visit our web site at NDOW.ORG.

Updated: 5/2006 - Peter V. Bradley - Nevada Department of Wildlife - Elko, Nevada.

APPENDIX B

Birds

Mountain plover (sensitive)
Northern goshawk (sensitive)

Western burrowing owl (sensitive)

Ferruginous hawk (sensitive) Loggerhead shrike (sensitive) Golden eagles (sensitive) Swainson's hawks (sensitive) Ferruginous hawks (sensitive)

Vesper sparrows (sensitive)

Short-eared owls (sensitive) Prairie falcons (sensitive) Black-rosy finches (sensitive)

Sage grouse (sensitive)

Greater Sandhill crane (sensitive)

Osprey (sensitive)

White-faced ibis (sensitive) Least bittern (sensitive)

Mammals

Pygmy rabbit (sensitive)

Townsend's big-eared bat (sensitive)

Spotted bat (sensitive)

Brazilian free-tailed bat (sensitive)

Hoary bat (sensitive)
Pallid bat (sensitive)
Silver-haired bat (sensitive)
Western red bat (sensitive)
Big brown bat (sensitive)

Small-footed myotis (sensitive) Long-eared myotis (sensitive) Fringed myotis (sensitive)

Little brown myotis (sensitive)

Long-legged myotis (sensitive)

Yuma myotis (sensitive)
Occult myotis (sensitive)
Western pipistrelle (sensitive)
Preble's shrew (sensitive)

Charadrius montanus Accipiter gentilis

Athene cunicularia hypugea

Buteo regalis Lanius ludovicianus Aquila chrysaetos Buteo swainsoni Buteo regalis

Chondestes gammacus

Asio flammeus Falco mexicanus Leucosticte atrata

Centrocercus urophasianus Grus canadansis Canadensis

Pandion haliaetus Plegadis chihi Ixobrychus exilis

Brachylagus idahoensis

Corynorhinus townsendii townsendii

Euderma maculatum Tadarida brasiliensis Lasiurus cinereus Antrozous pallidus

Lasionycteris noctivagans

Lasiurus blossevillii Eptesicus fuscus Myotis lucifugus Myotis ciliolabrum Myotis evotis Myotis thysanodes

Myotis volans Myotis yumanensis

Myotis lucifugus occultus Pipistrellus hesperus

Sorex preblei